

REMARKS

In the Office Action dated May 21, 2003, the Examiner required corrected drawings; objected to claims 1-3, 14 and 15 due to informalities; rejected claims 1-4 and 33 under 35 U.S.C. § 102(b) as anticipated by U.S. Patent No. 4,177,487 to Takenouchi et al. ("Takenouchi"); rejected claims 1, 9, 10, 14 and 15 under 35 U.S.C. § 102(b) as anticipated by U.S. Patent No. 3,654,475 to Montpas ("Montpas"); rejected claims 1, 5 and 6 under 35 U.S.C. § 102(b) as anticipated by U.S. Patent No. 4,024,391 to Bosserman; rejected claims 7 and 8 under 35 U.S.C. § 103(a) as unpatentable over Bosserman in view of European Patent publication of Riches; and rejected claims 11 and 12 under 35 U.S.C. § 103(a) as unpatentable over Montpas in view of U.S. Patent No. 5,001,348 to Dirsherl et al. ("Dirsherl").

Summary of this Amendment

By this amendment, Applicant amends claims 1, 10, 12, 14, and 15 to more particularly point out and distinctly claim what Applicant regards as his invention, adds new claims 35 and 36, submits corrected drawings for Figures 4 and 5. In light of the foregoing, Applicants respectfully request the reconsideration and timely allowance of the pending claims.

Detailed Response

As an initial matter, Applicant notes that the Examiner failed to list claim 34 (*see* Summary of the Action") as pending in this application. Furthermore, because the Examiner failed to reject claim 34, Applicants respectfully request its timely allowance.

Drawings

In the Office Action mailed May 21, 2003, the Examiner indicated that the proposed substitute sheet of drawings filed April 14, 2003 has been approved, and required submission of

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the corrected drawings in response. Accordingly, Applicants submit herewith corrected drawings including the approved corrections to Figure 5.

Claim Objections

The Examiner objected to claims 1, 14, and 15 because of use of the terms “the at least two beams” and “the beams.” By this Amendment, Applicant has amended claims 1, 10, 12, and 14 to change “the beams” to “the at least two beams,” thus obviating this objection.

Furthermore, the Examiner objected to claims 2 and 3, because “[electro-optic device]” was inadvertently left in the clean copy. By this Amendment, Applicant submits a clean copy of claims 2 and 3 without this term, thus obviating this objection.

Rejections under 35 U.S.C. § 102

The rejections of claims 1-6, 10, 14-15, and 33 as being unpatentable under 35 U.S.C. § 102(e) are respectfully traversed, since the Examiner has not made a *prima facie* case of anticipation. In order to anticipate Applicants’ claimed invention under 35 U.S.C. § 102(e), a single prior art reference must include each and every element of the claim in issue, either expressly or under principles of inherency, in a single prior art reference. Furthermore, “[t]he identical invention must be shown in as complete detail as is contained in the claim.” See M.P.E.P. § 2131(8th Ed. Aug. 2001), quoting *Richardson v. Suzuki Motor Co.*, 868 F.2d 1126, 1236 (Fed. Cir. 1989). Finally, “[t]he elements must be arranged as required by the claim.” M.P.E.P. § 2131 (8th Ed. 2001). Applicants submit that these requirements have not been met for at least the following reasons.

Independent claim 1 recites a combination of elements and requires “the means for gating and converting the at least two beams into image data is arranged to provide a whole image from

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an object to each respective portion of the photosensitive surface.” Applicants respectfully submit that none of the cited references, Takenouchi, Montpas, nor Bosserman discloses at least this element.

Regarding Takenouchi, the Examiner asserted that photo-electric converting device 22 and gate control circuit 23 constitute the means for gating and converting, as recited in claim 1.

Takenouchi states that “it is well known to those skilled in the art ... [to]mov[e] the document or the sensor to a one-dimensional scanning system in order to convert such information as pictures and letters on an original document into time sequential electric signals.” Col. 3, lines 10-15. Furthermore, “device 22 is connected with grid control circuit 23 for one-dimensional scanning.” Col. 3, lines 37-38. Using these features as shown in accompanying Figures 4 and 5, the control circuit and the converting device work in connection with each other to scan the document piece by piece, with each photo-cathode reading a subset of the document as a separate image. Therefore, Takenouchi does not disclose that “means for gating and converting the at least two beams into image data is arranged to provide a whole image from an object to each respective portion of the photosensitive surface.”

Regarding Montpas, Applicants respectfully submit that Montpas also does not disclose, that “the means for gating and converting the at least two beams into image data is arranged to provide a whole image from an object to each respective portion of the photosensitive surface,” as recited in claim 1. Montpas specifically states that “[t]he polyhedron 10 terminates in an apex 15 that enables an incoming light beam 16 (Fig. 2) to divide into four individual light rays (not shown).” Col. 2, lines 41-43. Because the light beam is “split,” it does not “provide a whole

image from an object to each respective portion of the photosensitive surface,” as recited in claim 1.

Regarding Bosserman, the Examiner asserted that the photocathode array switching means (40 and 42) of Bosserman constitutes the “means for gating and converting,” as recited in claim 1. Applicant respectfully disagrees. Bosserman discloses a picture element array image intensifier tube display device for processing an image. Bosserman uses a switch to provide a photocathode with a plurality of pixels, but less than the whole of the image. Bosserman does not disclose that “means for gating and converting the at least two beams into image data is arranged to provide a whole image from an object to each respective portion of the photosensitive surface,” as recited in claim 1.

Accordingly, Applicants submit that claim 1, and claims 2-6, 10, and 33 by virtue of their dependence from allowable claim 1, are allowable.

Independent claim 14 also recites that “means for gating and converting the plurality of beams into image data includes a single electro-optic device having independently-gated portions corresponding to each of the plurality of beams, and each of the plurality of beams corresponds to a whole image of an object.” As discussed above, with regard to claim 1, Montpas specifically describes splitting the beam (“[t]he polyhedron 10 terminates in an apex 15 that enables an incoming light beam 16 (Fig. 2) to divide into four individual light rays (not shown).” Col. 2, lines 41-43.) Because the light beam is “split,” Montpas cannot disclose or suggest that “means for gating and converting the plurality of beams into image data includes a single electro-optic device having independently-gated portions corresponding to each of the plurality

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of beams, and each of the plurality of beams corresponds to a whole image of an object,” as recited in claim 14. Accordingly, Applicants request the allowance of claim 14.

Independent claim 15 recites that “the gating of the plurality of beams is performed using a single electro-optic device having independently-gated portions corresponding to each of the plurality of beams, and each of the plurality of beams corresponds to a whole image of an

object.” As discussed above, with regard to claim 1, Montpas specifically describes splitting the beam (“[t]he polyhedron 10 terminates in an apex 15 that enables an incoming light beam 16 (Fig. 2) to divide into four individual light rays (not shown).” Col. 2, lines 41-43.) Because the light beam is “split,” Montpas cannot disclose or suggest that “the gating of the plurality of beams is performed using a single electro-optic device having independently-gated portions corresponding to each of the plurality of beams, and each of the plurality of beams corresponds to a whole image of an object,” as recited in claim 15. Accordingly, Applicants request the allowance of claim 15.

Rejections under 35 U.S.C. § 103

The rejections of claims 7-8, and 11-13 as unpatentable under 35 U.S.C. § 103(a) are respectfully traversed, since the Examiner has not made a *prima facie* case of obviousness. To establish a *prima facie* case of obviousness under 35 U.S.C. § 103(a), each of three requirements must be met. First, the reference or references, taken alone or in combination, must teach or suggest each and every element recited in the claims. Second, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to combine the references in a manner resulting in the claimed invention.

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Third, a reasonable expectation of success must exist. Moreover, each of these requirements must “be found in the prior art, and not be based on applicant’s disclosure.” (See M.P.E.P. § 2143 (8th Ed. 2001)). Applicants submit that these requirements have not been met for at least the following reasons.

Regarding rejections of claims 7 and 8 over Bosserman in view of Riches, Applicant respectfully submits that Riches does not cure the deficiencies of Bosserman, as discussed above, regarding independent claim 1.

More specifically, Bosserman does not disclose or suggest that “the means for gating and converting the at least two beams into image data is arranged to provide a whole image from an object to each respective portion of the photosensitive surface,” as recited in claims 7 and 8 (by virtue of dependence from claim 1). Riches does not disclose or suggest this feature either, and thus does not cure this deficiency. Accordingly, claims 7 and 8 are allowable.

Similarly, regarding the rejections of claims 11 and 12, Applicants submit that Dirscherl does not cure the deficiencies of Montpas. As discussed above, with reference to independent claim 1 (from which claims 11 and 12 depend), Montpas splits a beam, and therefore does not disclose or suggest that “the means for gating and converting the at least two beams into image data is arranged to provide a whole image from an object to each respective portion of the photosensitive surface,” as recited in claim 1. Similarly, Dirscherl’s recognition system uses a beam splitter and therefore similarly fails to disclose or suggest at least this element.

Accordingly, Applicants request allowance of claims 11 and 12.

Regarding claim 13, Applicant respectfully submits that Riches does not cure the deficiencies of Montpas, as discussed above, regarding independent claim 1. Neither reference

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discloses or suggests that “the means for gating and converting the at least two beams into image data is arranged to provide a whole image from an object to each respective portion of the photosensitive surface,” as recited in claim 13 (by virtue of dependence from claim 1).

Accordingly, claim 13 is allowable.

New claims 35 and 36

By this Amendment, Applicant has added new claims 35 and 36 to this application.

Applicant submits that no new matter is introduced. Furthermore, Applicant submits that new claims 35 and 36 are allowable at least because they recite “the electro-optic device is arranged to output the whole image from each respective portion of the photosensitive surface,” and “the electro-optic device is arranged to output image data corresponding to the whole image from each respective portion of the photosensitive surface,” respectively. Accordingly, Applicant requests the timely allowance of claims 35 and 36.

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Conclusion

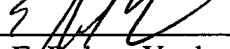
In view of the foregoing remarks, Applicant submits that this claimed invention, as amended, is neither anticipated nor rendered obvious in view of the prior art references cited against this application. Applicant therefore requests the Examiner's reconsideration and reexamination of the application, and the timely allowance of the pending claims.

Please grant any extensions of time required to enter this response and charge any additional required fees to our Deposit Account 06-0916.

Respectfully submitted,

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GARRETT & DUNNER, L.L.P.

Dated: October 21, 2003

By: 
E. Robert Yoches
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Attachments: One (1) Replacement Sheet- Figures 4 and 5.

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